Oak Ridge National Laboratory
Flex Fuel Vehicles Using E85

The Oak Ridge National Laboratory (ORNL) recognizes that there are many reasons to support the use of alternative fuel vehicles and specifically chose to use flex fuel vehicles that can be fueled using E85, a fuel that is 85 percent ethanol and 15 percent gasoline, or with gasoline when E85 is not available. ORNL's decision to use flex fuel vehicles that use E85 supports the greening of the ORNL fleet as required by the Energy Policy Act of 1992, Executive Order 13149, and DOE Order 450.1. E85 is also a bio-fuel made from plant-based materials such as corn, grains, and wood chips, and is a renewable resource. Because the ethanol is made from materials grown in the United States of America, using E85 supports local farmers, strengthens the United States' bio-energy industry, and reduces the nation's dependence on foreign oil. Additionally, E85-powered vehicles, when compared to gasoline-powered vehicles, have overall reduced tail pipe emissions (carbon monoxide, ozone-forming compounds, nitrogen oxides, sulfates, and particulates).

Flex Fuel Vehicle and E85 Fuel Tank

Consequently, this ORNL alternative fuel initiative has resulted in the following:

- ORNL has 91 flex fuel vehicles in its fleet and an on-site 8,000-gallon E85 fuel tank.
- In fiscal year (FY) 2005, 65 percent of vehicles procured were flex fuel vehicles. (The only time a flex fuel vehicle is not purchased to replace an older vehicle is if a flex fuel vehicle is not an option.)
- During FY 2005, ORNL used 35,861 gallons of E85 in its fleet on site, which is more than 2004 (27,394 gallons) and resulted in reduced tail pipe emissions.

When traveling off site, UT-Battelle, LLC personnel can also use E85 in ORNL's flex fuel vehicles in many areas of the nation. The National Ethanol Vehicle Coalition's home page (http://www.e85fuel.com/buy_e85.htm) provides a list of the locations of E85 fuel stations nationwide. The website also contains other useful links and resources.

Flex Fuel Vehicle at the E85 Pump

OAK RIDGE NATIONAL LABORATORY
U. S. DEPARTMENT OF ENERGY

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Reporter
OAK RIDGE NATIONAL LABORATORY
Managed by UT-Battelle for the U.S. Department of Energy * Issue Number 68 July 2005

Safety rolls both ways as cars, cyclists share Lab's roads

Summer weather, student interns and a new fitness focus mean one thing at ORNL: more bicycles on the road. ORNL's commitment to safety extends beyond the laboratory, and with an increased number of two-wheeled commuters and a more bike-friendly Bethel Valley Road, safety for cyclists is more important than ever.

Motorists and cyclists share equal responsibility for maintaining safe roadways, and laws and regulations governing bicycles are often misunderstood. Although they are a clean, convenient and responsible mode of travel on a crowded campus, their size (smaller than automobiles) and speed (usually slower than automobiles) call for preventive measures that drivers and cyclists must take to ensure safety on the roads.

In a past *ORNL Reporter,* the Nuclear S&T Division's Ray Brittain offered tips for drivers and cyclists to make sharing the road a little easier:

Safety tips and requirements for cyclists

- Always wear a helmet. This is your most important piece of safety gear, protecting your most important piece of equipment—your brain.
- Be alert. Always be aware that a motorist might not see you.
- Signal your intentions—use hand signals to indicate turns and stops.
- Use a mirror. This allows you to be aware of traffic approaching from behind.
- Follow traffic rules as if you are driving an automobile. Ride with traffic, not against it.
- Ride as near to the right-hand side of the road as practical, while avoiding road hazards that could cause you to swerve into traffic or lose control.
- Be predictable. Do not weave in and out of traffic or parked cars.
- As is the case with all slow-moving vehicles, you are required by Tennessee law to pull off the roadway when more than five vehicles are unable to pass.
- Pedestrians have the right-of-way on the ORNL campus.

Safety tips and requirements for motorists

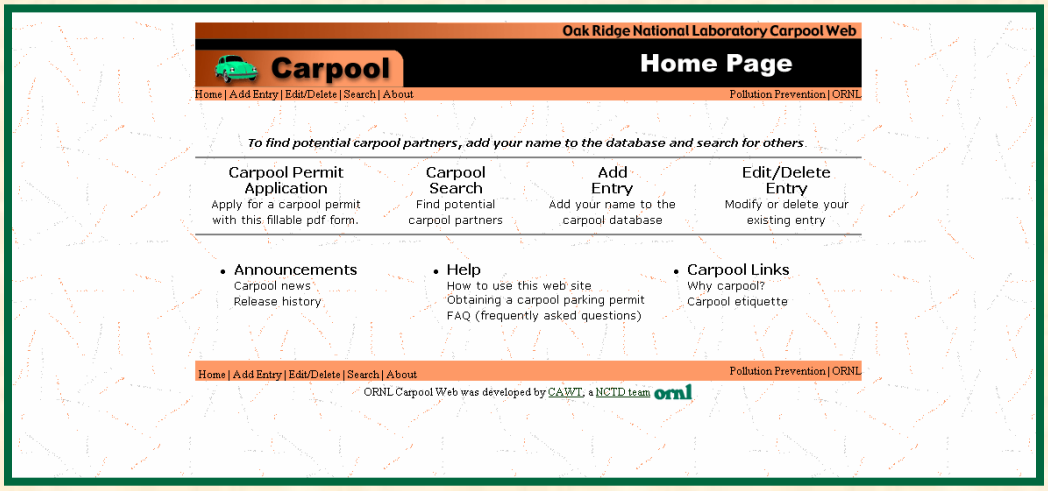
- Be alert. Like motorcycles, bicycles are harder to see than autos.
- Don't honk. This can startle a cyclist and cause him or her to swerve.
- When passing, be sure to clear the cyclist before moving back into your lane.
- Cyclists who are not on the extreme right-hand side of the lane are not being careless, but are in fact attempting to avoid hazards that could cause an accident.
- No cyclist's speed can be taken for granted. With today's improved equipment, some bicyclists may be traveling 25 or 30 miles per hour, if not faster. Others will be traveling at much slower speeds.
- Drivers turning left in front of oncoming cyclists cause a large percentage of car-cycle accidents.
- Overtaking, then making right turns in front of cyclists also causes many accidents.

Remember: in the event of even a minor collision, cyclists are much more likely motorists to suffer serious bodily harm. Even if you must yield to a driver or cyclist who is not following the rules, driving and riding defensively is key in avoiding accidents. —*Eva Millwood*


Bill Cabaniss

Communications and External Relations summer intern Eva Millwood, who wrote most of this issue, arrived from the University of Tennessee with her bike.

Recent Article on Bicycling/Walking Lane Added to Bethel Valley Road (http://www.ornl.gov/info/reporter/no68/july05.pdf)



Carpool Homepage (http://home.ornl.gov/~fli/)

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